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QUANTUM ENTANGLEMENT AND DARK ENERGY: THEIR LOGICAL PROSPECTS

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ABSTRACT

Using quantum entanglement, quantum zeno effect and dark energy we can build amazing instruments in the future instantaneous like communication, time machine etc.

Dark energy: whenever some objects feels gravity, it curves the space-time, space-time becomes like a bowl shaped pit below the object. But in the environment of dark energy a object always feel anti-gravity forces, so then there is a bump in space-time underneath the object, if that object has any velocity that must be negative velocity asspace-time curvature at that time is just opposite the case where the object feels the gravity not antigravity, so if it(object in antigravity) has a velocity it must be negative velocity, because situation where object feels antigravity its velocity is negative as situation is opposite of gravity induced situation. If we attain velocity magnitude C(Velocity of light) with positive velocity and continue for one week, after that will go into the future 100 years ahead of the time from when we started, for example. With negative velocity in similar fashion we can go 100 years back into the past. So if we find a path in universe through dark energy, and if an object proceeds with negative velocity with magnitude C through that path, that object can reach past in that manner. So this way time travel to past is possible in this way.

KEYWORDS: Faster than Light, Time Travel

INTRODUCTION

Quantum entanglement: by quantum entanglement we can send only random signals, not information, as far as we know in present day. For example two electrons are 10 billion light years apart. So in classical method these two can communicate in no less that 10 billion years, which seems absurd for any practical application. But if two electrons are entangled with lasers whose properties are exactly the same with each other, then this way these two electrons can be repeatedly entangled, measured and entangled .Means if their entanglement breaks down they can again be entangled like before. So this way for example two electrons A and B are entangled, then if we measure the spin of A(say spin up), instantaneously it will make electron B's spin in opposite direction(say spin down). Then again we entangle them and measure their spin again. These procedure we have to do as many times as we wish. For example we do 100 times. And during these times if we bias the measurement of one electron A(say we always try to know whether it is in spin up direction), then by QUANTUM ZENO EFFECT, while we finish measuring and entangling 100 times, majority of cases will give spin of one electron Ain spinup direction and spin of electron B in spin down situation. because we are measuring electron A with bias in checking whether it is giving spin up 100 times so after 100 times electron B will know that measuring bias of electron A is in spin up direction.so after that 100 times electron B can register spin down or bit 1, otherwise if bias in measuring electron A is in opposite direction (spin down) that of previous, the electron B will register spin up most of the times in 100 attempts we have described above so person at electron B will register bit 0. This way if we carry out 100 biased measurement of electron A in 1 second, within one second electron B will register bit 1 or bit 0

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2 Rudra Prakash Sarkar

according as we described above.so with the help of quantum entanglement and quantum zeno effect properties we can transmit a bit of information to person at electron B in one second.In classical method it would take at least 10 Billion years. So this way we can send information much more quickly than that of classical method of telecommunication.

CONCLUSIONS

So as engineering skill of human race develops, in future with the help of dark energy and quantum entanglement and quantum zeno effect we can build amazing devices like time machine or superfast communication device.

REFERENCES

1. BOOK-The Mind and Brain: Neuroplasticity and power of mental force"

address-2/1/2 deblane, kolkata-14, pincode-700014, India.

2. Web

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